Quality Studies and Improvements in Action
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Presented by:
Aimee Goulette, MHA, Cancer Center Director of Quality
Bonnie Chapman, RN, MPH, Former Cancer Center Director of Quality
SUNY Upstate Cancer, Syracuse, NY

SUNY Upstate Cancer Center: Syracuse, NY

Upstate sees more than 2,000 new cancer patients per year:
• 45,000 plus visits on the downtown campus and additional visits to our satellite locations

Services:
• Integral therapies: Reiki, yoga and acupuncture, healing garden, meditation room, patient and family education center.
• Support services such as social work, nutritional counseling and patient navigators
• Prevention, screening, risk assessment and survivorship programs

Syracuse: Population of 145,000
• 5,766 people per square mile
Cold fact: Syracuse receives more snowfall than any other major city in the entire country.
Upstate Cancer Center

Departments:
- Adult/Pediatric Hematology Oncology
- Radiation Oncology- ARC Accredited
- Multidisciplinary
  - Breast Cancer Program
  - NAPBC-Accredited
  - Gynecologic Oncology
  - Head & Neck Program
  - Hepatobiliary Program
  - Prostate Cancer Program
  - Thyroid Cancer Program
  - Thoracic Oncology Program
  - Psycho Oncology
  - Integrated Medicine
  - Survivorship

Upstate is among the 1% of accredited cancer programs in the country who have achieved the Outstanding Achievement Award for four consecutive survey cycles. Programs recognized for outstanding achievement demonstrate compliance in 29 standards and commendation in seven standards.

Outline

- Standard 4.7
- Upstate Quality Program History
  - Past Projects
- Quality Execution
  - Current Projects
- Documentation
- Upstate Quality Improvements in Action
- Summary
Standard 4.7: Studies of Quality

Each year, based on category, the quality improvement coordinator, under the direction of the cancer committee, develops, analyzes, and documents the required studies that measure the quality of care and outcomes for patients with cancer.

Patient Outcomes: Standard 4.7

• Multidisciplinary representation:
  – Clinical
  – Administrative
  – Patient
• Quality studies can evaluate various spectrums of cancer care:
  – Diagnosis
  – Treatment
  – Supportive care of patients
  – Issues related to structure, process, and outcomes
What Will Not Qualify for 4.7?

- Duplicated topics or studies from year-to-year
- Ongoing monitoring activities following a completed quality study
- Survival studies and in-depth analysis used in Standard 4.6
- A study that is required by an outside, recognized organization related to oncology is acceptable if it follows the required study criteria outlined in this standard
- Review of data presented in the NCDB data reports or tools including measure compliance

Quality Improvement in Context – the Last 5 Years

- March 2012-May 2014 conversion to EMR (Epic and Beacon)
- August 2014 Moved into our new Cancer Center
  - Outpatient Adult Hematology/Oncology
  - Outpatient Pediatric Hematology/Oncology
  - Radiation Oncology
  - Multi-Disciplinary Clinic
- CoC 2012 Continuum of Care and Phase-in Standards
- 2013-2015 Leadership changes
How We Started

First Cancer Center Director of Quality hired in May of 2011
- New position
- No direct reports
- Established role recognition
  * Step 1 – use your strengths
  * Step 2 – build social capital
  * Step 3 – invest in people
  * Step 4 – asked for partners

Approaches to Quality Improvement

**Approach 1**
- Check the box
- Do studies only to meet the CoC standard
- Go through the motions
- Conduct 2 quality studies per year
- Stick to what has always worked
- Do the work yourself
- Meet the standard

**Approach 2**
- Make lasting change
- Initiate studies to learn how to improve patient care
- Get in the weeds
- Conduct many quality studies per year
- Try something new
- Empower those around you
- Surpass the standard
Lesson: Staying Engaged with a Problem Over the Long Term, Involve Staff

Infusion Area Flow
- 2013 patient acuity and time pilot study and study
- Purpose to address scheduling in new Cancer Center
- Results

Pilot - Study
Number of nurses: (3) *All nurses for 5 business days*
Number of patients: (31) 152
Avg arrival time – labs: (19 min) 18 min
Avg arrival time – vitals: (24 min) 23 min
Avg time in exam room to infusion waiting: (37 min) 33 min
Avg infusion waiting – chair: (33 min) 33 min
Avg seated in chair - drugs: (34 min) 32 min
Avg total time in chair: (3 hrs) 2h 55min
Lesson: Staying Engaged with a Problem Over the Long Term, Involve Other Experts

- Move into Cancer Center Planning
  - Consult system engineers
  - Decide on a pager system
  - Benchmark - minimize motion waste (people or equipment moving or walking more than is required to perform the processing)
- Lean concept of waste reduction

Lesson: Ideas Come from Everyone – Give Them Credit

2 Studies

#1. Patient wait times
- Average results:
  - Laboratory wait: 12-16 min
  - Exam room: 20 min
  - Infusion: 7-13 min

#2. Nurse/Pharmacy communication
- Study
  - 12.6 hours observation
  - 192 trips by nurses to the pharmacy
  - 83 (44%) trips the nurse returned with medication
- Improvement – use of pagers
  - 75% of nurses returned with medication
Lesson: Empower Those Around You

- Nurse initiated studies
  - CHG bathing
  - Differential Time to Positivity
- Quality assistance
  - Data collection and analysis
- OCN
  - Abstract
  - Poster
  - Award
- Down the road

Lesson: Choose an Issue/Standard That You Don’t Meet and Use the Project to Raise Awareness, then Change

NCCN Guideline: Indication for red blood cell transfusion in patients with cancer
- Asymptomatic anemia: hemodynamically stable chronic anemia without acute coronary syndrome: transfusion goal to maintain HB 7-9g/dL

NCCN Guideline: Single-unit vs. double-unit transfusion
- “In most instances, PRBCs should be transfused by the unit and reassessment should be conducted after each transfusion.”

Considerations for over/under use
- Risk to the patient
- Additional cost
- Overuse of resources
- Palliation
- Inpatient vs. outpatient use
- Outpatient safety
- Symptomatic patients
Lesson: Choose an Issue/Standard That You Don’t Meet and Use the Project to Raise Awareness, then Change

- Random sample of inpatient and outpatient oncology patients who received RBC transfusions from June 2014 to August 2014
  - Reviewed by Dr. Matthew Elkins according to the NCCN guidelines
  - 83 (15 Peds) Transfusion requests
    - 13 met criteria
    - An additional 10 did not meet hct criteria but had symptoms
    - 59 did not meet hct criteria and symptoms were not documented
  - Units transfused
    - 51 had 2 or 3 units transfused
  - Adult inpatient vs outpatient transfusions
    - 42 inpatient transfusions: 39 (93%) received 2 units
    - 24 outpatient transfusions: 20 (83%) received 2 units

Lesson: Purpose of Study is Not to Demonstrate High Compliance – but to Study and Improve Areas that Need It

- Advance directives
- NCCN Guidelines Version 1.2015 Palliative Care: Advance Care Planning
  - “When the patient’s life expectancy is reduced to months to weeks, the oncology team should actively facilitate completion of appropriate advance directives and ensure their availability in all care settings. MOLST/POLST should be documented and accessible to all providers across care settings.”
- 300 oncology flagged patients died the hospital from March 2014-March 2015
- DNR/DNI, Health Proxy and MOLST/POLST presence in Epic
- 1 week, 2 weeks, 12 weeks and 12+ weeks prior to death
Lesson: Lay the Ground Work on Important Issues

- **Acceptance of Palliative Care among providers**
- **Analysis of Palliative Care use**
  - Avg. time from admission to first consult has remained at less than 8 days and median time 4 days
  - Avg. number of days from consult to death increased 70% to 6.3 days in 2011 from 3.7 days in 2009
  - Of those seen by Palliative Care, 46.6% died in the hospital in 2011
Lesson: Contribute When Needed, Let Teams Run with Their Ideas

- Patient Satisfaction Monitored Monthly
  - Outpatient oncology symptom management received low scores
- Patient Education Assessed
  - Nurses giving education, but patients not realizing they were receiving “education”
  - Education materials not standardized and patients overwhelmed
- Materials created
  - Multi-disciplinary team
  - Patients receive summary education and specific symptom management as needed
  - Across continuum of care
  - Patients are told they are receiving “education”
Lesson: Contribute When Needed, Let Teams Run with Their Ideas

Quality Resources

**Ideas**
- Research studies
- Recent publications
- Press Ganey: Patient Complaints
- Safety Events
- Co-workers: help initiate ideas
- Complaints
- Administrative changes
- Meetings...yes, meetings

**Direction**
- Websites:
  - CoC, ACCC, NCCN, ASCO, CAnswer Forum, CDC, ONS, NCI, NIH
- Research studies
- Advisory Board
- National benchmarks and metrics
- Other knowledge experts
Establishing “Buy-in”

- Open ear approach
- Attend meetings
- Assist turning a question or complaint into a project
- Respond quickly and timely
- Be reliable
- Use current examples and data to show need
- Working relationship with IMT
- Take your time

Who’s Ideas are important?
- MD’s
- RN’s
- APC’s
- Medical Office Assistant
- Administrative Staff
- Housekeeping
- Administration/Managers
- Patients
- Medical Officers
- Support Services

Meaningful Meetings: On the Fly

Meetings on the fly:
- Rounding
- Talk with people in the moment
- Power meetings

Official meetings:
- Build from progress
- Leave with a goal
- Hold team accountable
- Meet frequently for less time
- Include the experts
- Prioritize patient need
Review Quality Studies Quarterly

- Quarter 1: Identify quality studies and benchmarks
- Quarter 2: Implement study
- Quarter 3: Analyze study results and adjust
- Quarter 4: Review results and follow-up

Documentation

Complete all required standard fields in the SAR:

- Project progress and discussion must be presented to cancer committee and clearly documented
- Consistent documentation for the required number of quality studies include:
  - methodology
  - summaries
  - analyses
  - recommendations
  - follow-up
- Cancer committee minutes in which the results of the studies were reported must be provided
4.7 Quality Studies

<table>
<thead>
<tr>
<th>Question/Heading</th>
<th>What is causing patients to miss appointments that result in prolonging their treatment schedules? Should patients at a higher risk for missing appointments undergo more aggressive follow-up?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2016</td>
</tr>
<tr>
<td>Describe the problem that is being studied</td>
<td>It is known that missing appointments can prolong cancer treatment times and patient outcome. Can we improve the number of appointments that need to be rescheduled or missed.</td>
</tr>
<tr>
<td>Describe the criteria/methodology used to study the problem</td>
<td>Patient cancellations and appointment changes are tracked in our EMR system. We will measure the number of cancellations per patient and physician in order to identify barriers to care and root cause of missed appointments.</td>
</tr>
<tr>
<td>What were the study findings?</td>
<td>To be determined</td>
</tr>
<tr>
<td>What national benchmarks were used?</td>
<td>Missed appointment patients with advanced cancer have worse survival and increased ER utilization then kept appointments. (Hwang, Andrew. Appointment &quot;no-shows&quot; are an independent predictor of subsequent quality of care and resource utilization outcomes. J Gen Intern Med 2015)</td>
</tr>
<tr>
<td>What action was taken at the completion of the study?</td>
<td>TBD</td>
</tr>
<tr>
<td>When did the cancer committee review the study results?</td>
<td>March 2016</td>
</tr>
</tbody>
</table>

Plan  Do  Study  Act

Plan

Specific: What is the desired result?
- Problem Statement
- Who, what, where, deadlines
- Why

Measurable: How can you quantify numerically or descriptively?
Plan for data collection:
- What will you measure
- Who, when and where

Achievable: What skills are needed?
What resources are necessary?
- Lead Committee Member and group members

Realistic: Is this goal in alignment with the CoC standard?

Timely: What is the deadline?
Is the deadline realistic?
DO
How to achieve the plan? (SMART)
- Document problems and unexpected observations
- Begin analysis of data

STUDY
Study Topic
Criteria for evaluation
Conduct study according to identified measures
Prepare summary
Compare with national benchmarks
Action plan based on the evaluation
Follow-up steps to monitor
Monitoring the effectiveness of action plan

ACT
Plan for next cycle:
Is this an improvement?
- Adopt, adapt, or abandon

Best Practice: Project List
- Keep ongoing list of ALL projects - not just CoC
- Use past fields from the SAR and SMART goal sheet to organize each project
- It is better to over document!
- During the year keep a running list of new projects for the following year
**Project Example**

**What is the problem?**
- Orders are not signed in a timely fashion
- Patients are waiting excessive amounts of time for treatment

**Who does it effect?**
- Patients: satisfaction and possibly outcome

**Why is this problem happening?**
- Not sure: so we developed a tracking sheet for nursing teams to tally the *reason* for a delay in treatment
Project Example (cont’d)

Results we found by category:
- Orders not signed at arrival to infusion
- Orders signed but needed correction
- Occurrences where patient had to wait to treatment

Action: Physicians notified of findings and presented at quality meeting
- Unsigned order report being developed by IMT which will be pulled each morning
- Physicians will review orders prior to leaving patient room

Follow-Up: Nurses will continue to track order delays to seek improvement
- Results will be compared to first data collection
- If progress is not made we will seek further intervention

4.7 in Action-2016

Timeliness of Diagnosis: Breast
• How long does it take our staff to notify patient of diagnosis once we have received results from pathology? Is this within a timely manner?

Assessment of Quality Measures for Clinical Stage I NSCLC
• Why is it difficult to accurately collect the 4 specific quality measures for early stage NSCLC recommended by NCCN? What barriers are causing the measures to not be collected?

Delays in Chemo Treatment
• How can we decrease the occurrences of delayed chemo treatment due to order related issues? What are the underlying causes of delayed treatment?

Distress Screening Referrals to Support Services
• Why are patients not utilizing our support services? Are we utilizing our distress screening tool and support services to its full potential?

Time from Diagnosis to Treatment: Stage I NSCLC
• Why are patients with NSCLC exceeding a treatment date over 8 weeks from diagnosis? For those over 8 weeks what could we have done differently?
Improvements in Action

Quality projects may be ongoing regardless of outcome
– It is okay keep projects open for longer than the CoC year
– Results may be review several times before improvement is seen
– Positive quality improvements can often cause new quality projects

Patient Distress

Pilots
#1. January to May 2012 pilot of breast cancer patients
• NCCN distress tool and 0-10 thermometer
• 47 respondents assessed on their first visit to the BCP
#2. October 2013 to March 2014 pilot of Hem/Onc and Rad Onc
• 0-10 thermometer
• Different screening protocol to capture all visits

Patient Distress

2nd Pilot – October 2013 to March 2014
• Data entry in pain comment
• Consistency
• Ensuring follow-up
• Ensuing changes – wait for move
• Establish Epic solution for data entry
  • Forms
  • Distress Box
Patient Distress 2015

**Adult Hem/Onc Distribution of Patient Distress**

<table>
<thead>
<tr>
<th>Distress Level</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.2%</td>
</tr>
<tr>
<td>2</td>
<td>10.0%</td>
</tr>
<tr>
<td>3</td>
<td>9.6%</td>
</tr>
<tr>
<td>4</td>
<td>12.4%</td>
</tr>
<tr>
<td>5</td>
<td>17.5%</td>
</tr>
<tr>
<td>6</td>
<td>11.7%</td>
</tr>
<tr>
<td>7</td>
<td>10.0%</td>
</tr>
<tr>
<td>8</td>
<td>7.5%</td>
</tr>
<tr>
<td>9</td>
<td>3.5%</td>
</tr>
<tr>
<td>10</td>
<td>10.7%</td>
</tr>
</tbody>
</table>

**Radiation Oncology Distribution of Patient Distress**

<table>
<thead>
<tr>
<th>Distress Level</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14.9%</td>
</tr>
<tr>
<td>2</td>
<td>21.3%</td>
</tr>
<tr>
<td>3</td>
<td>16.1%</td>
</tr>
<tr>
<td>4</td>
<td>11.5%</td>
</tr>
<tr>
<td>5</td>
<td>14.9%</td>
</tr>
<tr>
<td>6</td>
<td>8.0%</td>
</tr>
<tr>
<td>7</td>
<td>3.7%</td>
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<tr>
<td>8</td>
<td>5.3%</td>
</tr>
<tr>
<td>9</td>
<td>1.5%</td>
</tr>
<tr>
<td>10</td>
<td>3.1%</td>
</tr>
</tbody>
</table>

Distress Management 2015

- **Documentation - Flow sheet**

[Image of Distress Management Flow sheet]

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Distress Management 2015

- New oncology patient visits
- Screening done by nurse
- Initial estimates – 95% of new oncology patients

2015 data:
- 548 patients screened
- 56 referrals made
- 54% to Social Worker
- Psych/Onc, Dietician, Other

![Distribution of Patient Distress, Jan-Jun 2015](image)

Upstate Distress Frequency April 2015 – March 2016

- Multi-D Distress Distribution
  - 17%, 6%, 12%, 15%, 8%, 14%, 7%, 4%, 9%, 2%, 7%

- Hematology Oncology Distress Distribution
  - 23%, 7%, 10%, 9%, 8%, 13%, 6%, 7%, 8%, 4%, 4%

- Radiation Oncology Distress Distribution
  - 19%, 9%, 13%, 14%, 5%, 12%, 8%, 7%, 5%, 3%, 7%
### Distress Screening at Upstate April 2015 – March 2016

- **Overall:** 20% of patients reported having zero distress at first treatment
- **Currently only screening at first treatment**
- **Distress scores over 5 are notified to treating physician to determine need of referral**
- **Only 13% of patients in distress accepted referral**

### Patient Distress Quality Study – 2016

**Title:** Increase distress screening and referrals to support services for patients. Why are only 13% of patients in distress utilizing services?

**Purpose:** Ensure all patients have access to distress support even if they may not be aware of their distress and increase physician referrals.

**Action:** Increase distress screenings during treatment - not just at first visit. Determine why patients decline referrals to support services and why physician determined referral was not needed.

**Measure:** Record main reasons and/or barriers that patients decline referrals and what are the trends of declining support services.

**Goal:** Services increase→ distress decreases
**Approach, Documentation, Empowerment**

- **Approach**
  - What do we need to know to become better?
  - How can I use the information I find to drive change?

- **Documentation**
  - SMART Goals and PDSA steps
  - Have measureable outcomes and identified benchmarks
  - Project list, review and update quarterly, many projects
  - Document in the SAR format
  - Present at meetings, ensure well documented in the minutes

- **Empowerment**
  - To what lengths are you willing to go to build a culture of quality and improvement?

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**Overall: Standard 4.7**

*Each quality study is required to have the following components, at a minimum:*

- Must indicate the study topic that identifies a problematic quality-related issue within the cancer program
- Define study methodology and the criteria for evaluation, including data needed to evaluate the study topic or answer the quality-related question
- Conduct the study according to the identified measures and methodology
- Prepare a summary of the study findings
- Compare data results with national benchmarks or guidelines
- Design a corrective action plan based on evaluation of the data
- Establish follow-up steps to monitor the actions implemented

*Document! Document! Document!*
Questions?

"Quality is never an accident; it is always the result of intelligent effort."
—John Ruskin